

PhytoTechnology Laboratories®

Product Information Sheet

M541 Murashige & Skoog (MS) **Modified Basal Medium**

Properties

Form: Powder

Appearance: White to Yellow

Application: Plant Tissue Culture Solubility: Soluble in Water

Typical Working

5.69 g/L

Concentration:

Storage Temp: 2-6 °C

Storage Temp of Preparation of concentrated solutions is not recommended as insoluble

Stock Solution: precipitates may form.

Other Notes: Contains the macro- and micronutrients and vitamins as described by Murashige and Skoog (1962) with the following exceptions: Potassium

Phosphate Monobasic is omitted, Sodium Phosphate Monobasic is added, and Ferrous Sulfate and Disodium EDTA are replaced with Ferric Sodium

EDTA. Approx. $pH = 4.75 \pm 0.5$

Formula (mg/L)

Ammonium Nitrate	1650
Boric Acid	6.2
Calcium Chloride, Anhydrous	332.2
Cobalt Chloride•6H ₂ O	0.025
Cupric Sulfate•5H ₂ O	0.025
Ferric Sodium EDTA	36.7
Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H ₂ O	16.9
Molybdic Acid (Sodium Salt)•2H ₂ O	0.25
Potassium Iodide	0.83

Potassium Nitrate	1900
Sodium Phosphate Monobasic	300
Zinc Sulfate•7H ₂ O	8.6
Adenine Hemisulfate	150
Casein, Enzymatic Hydrolysate	1000
Glycine (Free Base)	2
myo-Inositol	100
Nicotinic Acid (Free Acid)	5
Pyridoxine•HCI	1
Thiamine•HCI	0.5

Application Notes

Plant Tissue Culture Tested

References

Murashige, T and F Skoog. 1962. A revised medium for rapid growth and bioassays with tobacco tissue cultures. Physiol. Plant. 15: 473-497

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